

RIFA

Red Imported Fire Ant



Report to the Legislature

JUNE 2000



2000 Report to the Legislature Red Imported Fire Ant

EXECUTIVE SUMMARY

The Red Imported Fire Ant (RIFA) is an aggressive exotic insect that was introduced into the Southern United States in the late 1920's and has since spread to 11 southeastern states. In those states, the RIFA has had adverse impacts on human health, agriculture, the natural environment, and human activities.

In California, RIFA was discovered in October 1998 when a nursery in Nevada found RIFA in a shipment from a nursery in the Trabuco Canyon area of Orange County. The California Department of Food and Agriculture (CDFA) conducted surveys around the Orange County nursery revealing that RIFA was generally infesting the entire area. In December 1998, Secretary of Agriculture William (Bill) J. Lyons, Jr., convened a science advisory panel in Orange County to recommend a course of action. Based on the RIFA Science Advisory Panel (RIFA SAP) recommendations and input from various stakeholders, CDFA developed a plan for RIFA control/eradication that relies on the involvement of infested communities.

Subsequent to the panel meeting, CDFA found additional infestations of RIFA, at varying levels, in Orange County (36 sites), Los Angeles County (11), Riverside County (10), San Bernardino County (2), and San Diego County (4). In cooperation with the local agricultural commissioners, CDFA began treatment of RIFA infested properties in order to suppress the ant population until the proposed plan for regional implementation received funding.

Currently, the Governor's Budget provides a total of \$40 million over a five-year period to combat the pest in California -- \$8.7 million in Fiscal Year 1999/2000 followed by appropriations of \$7.3 million annually for the subsequent four years. In addition, Senate Bill 204, legislation authored by Senator Lewis, provides \$2 million that is available for expenditure without regard for fiscal year.

The overall goal of the RIFA program is to provide an intensive, coordinated state-community-wide program with a high probability of containing the spread, controlling and/or eradicating the current population, and detecting RIFA if it exists elsewhere in California.

Results

The RIFA program has made significant progress in Fiscal Year 1999/2000. All key components of the program have been implemented and progress has been made in eliminating the pest in infested locations.

CDFA has negotiated 18-month contracts (January 2000 through June 2001) with six local agencies for survey and treatment activities. Under these contractual agreements, all infested sites have been placed on a 90-day treatment schedule for one year and until ant activity ceases. Due to the persistence of this pest, monitoring must take place for two additional years before eradication can be declared. While continuing surveys have discovered new sites infested with RIFA, the following describes the progress that has been made in key areas of this program.



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Local Treatment Programs

- **Orange County:** The entire county has been surveyed and is considered generally infested. All public access locations were treated by CDFA in 1999. A special agency created by the county has now taken over the treatment function and has re-treated 60 percent of the known infested sites since the start of the treatment season in February 2000. Surveys in heavily infested sites, such as O'Neil Park in Trabuco Canyon, indicate dramatic reductions in mound activity.
- **Riverside County:** CDFA and the Riverside County agricultural commissioner conducted a partial treatment on public access sites and golf courses through October 1999. These locations show reductions in mound activity and will be monitored and treated as necessary this year. Riverside County has two contractors: Coachella Valley Vector Control for the Palm Desert/Indio area and the Riverside County Agriculture Department for western Riverside County. Both contractors resumed survey and treatment activities in the spring of 2000. Two new locations were found this spring in Temecula and Orangecrest. Surveys and treatments around these sites have started.
- **Los Angeles County:** Surveys have revealed several new sites throughout Los Angeles County and the total number of infested sites includes 184 properties in 11 cities (Arcadia, Azusa, Cerritos, Lakewood, La Mirada, La Puente, Mission Hills, Van Nuys, Walnut, West Covina, and Whittier). All of these properties have been treated at least once. Follow-up surveys and treatments will continue in order to confirm that the RIFA has been eliminated from known positive sites.
- **San Diego County:** RIFA infestations were first found in San Marcos on three properties and an adjoining greenbelt in March 1999. Later, RIFA infestations were also detected in Poway, Rancho Penasquitos (two areas), and a planting area at LegoLand Park. All locations were surveyed and treated one to two times. Only one site continues to have ant activity (Rancho Penasquitos).
- **San Bernardino County:** The first RIFA infested site in San Bernardino County was discovered in August 1999 and includes seven adjacent residential properties in Fontana. After two treatments, there has been ant activity on only one of the seven properties. Additional treatment is scheduled. One new location was found this spring in the City of San Bernardino. Survey and treatment around this site has started.

Interior Quarantine

Quarantine activities have effectively closed the door on the spread of RIFA via the nursery industry in the infested areas. All production nurseries in the quarantine areas are under compliance treatments. Of 34 nurseries found infested, 12 appear to have successfully eliminated RIFA after 12 months of treatment. The remaining nurseries may be declared non-infested within the next few months. This will eliminate nurseries as a threat of the movement and spread of RIFA.



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Public Outreach

CDFA implemented a contract with a public relations firm to raise public awareness about RIFA. The public relations campaign is designed to encourage the public to recognize and report fire ant mounds, inform residents what they can do if they find fire ant on their property, and reduce the risk to the public from ant stings. The campaign will also support the public outreach activities of the contracting local entities. Elements of the outreach effort to date include newspaper ads, cable television spots, door-to-door fliers, direct mailings, and personal appearances at various community functions and schools. Over 4,000 calls have been made to CDFA's toll-free hotline established for the public to get information or to report fire ants.

Statewide Survey

CDFA and county agricultural commissioners began conducting a risk-based survey focused on areas outside of the generally infested areas of Southern California in 1999. Special attention has been given to nurseries and orchards in the Central Valley that may have received bees for pollination from RIFA infested states. These surveys detected 10 sites totaling 3,284 acres, all of which have been associated with the movement of infested beehives. Six of the 10 sites contained no RIFA after treatment. The remaining orchards will be treated again. The prospect for complete success at these sites is excellent.

The statewide survey also uncovered RIFA infestations at four nurseries in the cities of Fresno and Bakersfield, and in Santa Barbara County. These nurseries will require one year of treatment and monitoring to be declared free of RIFA. No ants were found in surrounding communities.

Many areas of the state are favorable to the establishment of the RIFA and have not been surveyed. Although the surveying is not complete and additional infestations may be discovered (particularly in almond orchards in the San Joaquin Valley), the prospects for complete eradication of isolated finds is very high.

Exterior Quarantine

In the first eight months of Fiscal Year 1998/1999, California's agricultural inspection stations located on the state's borders intercepted 90 shipments of commodities infested with RIFA. In the same period of Fiscal Year 1999/2000, 12 shipments were detected with the pest, representing a decrease of 87 percent from the previous year. Truck drivers and commodity shippers have confirmed that CDFA's notification activities as part of the RIFA program has made them more selective in what commodities they move to California to avoid rejected shipments at California's borders. In 1999, eight shipments of bee colonies from other states were found by CDFA inspectors to be infested with RIFA. During the 2000 season, only two shipments were found infested, representing a 75 percent decrease. This decrease was a direct result of intensified inspections and the outreach efforts conducted by CDFA to the Texas bee industry alerting them of the state's "zero tolerance" for RIFA in bee colonies entering California.



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To augment California's exclusion efforts, CDFA is contracting with the Arizona Department of Agriculture to conduct RIFA inspections on the Arizona/New Mexico border, providing a large "buffer zone" for California. Additionally, a border station crew of roving inspectors monitors unguarded secondary roadways in Southern California for movement of RIFA host material.

Conclusion

Program results clearly indicate that progress has been made against RIFA infestations in California. Both the pest surveys and public response indicate that the treatment and quarantine efforts have had an impact on the fire ant. While there have been some new locations found with the pest, a widespread infestation such as that found in Orange County has not been discovered. Additionally, a number of sites positive for RIFA in 1999 show little or no ant activity this year. Statewide survey for RIFA must continue and be expanded in order to identify incipient infestations that escaped from Southern California prior to the start of the program. It is also the best means to identify infestations that may have started as the result of interstate movement of bees or commerce. Survey within the infested region of Southern California must be expanded in order to identify all possibly infested sites. Current program funding limits the extent to which both types of survey can be accomplished.

It is also possible that California's terrain and climate offer some obstacles to RIFA establishment. California does not have the summer rains of the southeast that accommodate synchronized mating flights. Natural barriers, such as deserts, also inhibit the natural movement of RIFA, restricting its movement to artificial (man-made) means.

To review the progress of the program, CDFA re-convened the Red Imported Fire Ant Science Advisory Panel (RIFA SAP) in May 2000 in Costa Mesa, California. The review included a tour of several areas that had been heavily infested with RIFA during the SAP's 1998 visit.

During the December 1998 visit of the RIFA SAP; the members expressed reservations about the possibility of eradicating RIFA from California. Based on what they saw in the May 2000 visit, they now believe that eradication of this pest from the state is potentially possible if the level of enthusiasm and commitment that they saw can be maintained along with the monetary support of the state and local government.

The results of the first year of activity show that the effort is moving in a positive direction toward meeting the goals of the five-year program. With expanded public outreach and continuing survey and treatment, significant reductions in the pest will occur and achieving program goals is possible in future years.



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INTRODUCTION

The Red Imported Fire Ant (RIFA) is an aggressive, exotic insect that was introduced into the Southern United States in the late 1920's and has since spread to 11 southeastern states. In those states, the RIFA has had adverse impacts on human health, agriculture, the natural environment, and human activities.

The RIFA infestation in California was discovered in October 1998 when a nursery in Nevada found RIFA in a shipment from a nursery in the Trabuco Canyon area of Orange County. Subsequent surveys of the Orange County nursery and the surrounding residential and commercial properties revealed that the RIFA was generally infesting the entire Trabuco Canyon area. In December 1998, the California Department of Food and Agriculture (CDFA) convened a Red Imported Fire Ant Science Advisory Panel (RIFA SAP) (Attachment I) in Orange County to assess the situation and to provide recommendations on how to proceed. Based on the RIFA SAP recommendations (Attachment II a), CDFA developed a plan for RIFA control/eradication based on involvement of the local communities in the infested area (Table 1).

Table 1

Local Activities and Assistance	
Public Outreach	Information and training will be provided to help communities organize an optimal fire ant program.
Program Management	The state will provide local coordination of multi-city treatment, outreach, and monitoring programs.
Interior Quarantine	Industries that present the highest risk for spreading fire ant will be monitored for compliance with fire ant quarantines.
Environmental Monitoring	Application of insecticides used in the treatment program will be monitored by state agencies.
Local Treatment	Treatment will begin in core areas.
Statewide Activities	
Statewide Survey	State biologists will survey high risk sites to detect any new infestations of fire ant.
Research	Top priority research includes refining treatments for fire ant under California conditions.
Exterior Quarantine	Surveillance for fire ant will be strengthened at California's agricultural inspection stations.

In formulating this approach, the CDFA met with and solicited input from other state agencies (Attachment III), the Audubon Society, the Nature Conservancy, the Sierra Club, agricultural interests, local officials in Orange County, the University of California, the Texas Department of Agriculture, the Texas Agricultural Extension Service, and the RIFA SAP.



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To support the local and statewide activities between January 1999 and July 1, 1999, CDFA used funds from the agency's emergency fund. In Fiscal Year 1999/2000, funding for the RIFA program was provided by a combination of \$8.7 million in the Governor's budget and a one time legislative appropriation of \$2 million in Senate Bill 204 (Attachment IV). Overall, the Governor's Budget provides a total of \$40 million over a five-year period to combat the pest in California: \$8.7 million for the first year of the program, followed by appropriations of \$7.3 million annually for the subsequent four years.

The CDFA negotiated 18-month contracts (January 2000 through June 2001) with six local agencies, designated by the respective county boards of supervisors, to perform RIFA activities within their respective spheres of responsibility (Table 2).

Table 2

RIFA Contracts for Fiscal Years 1999/2000 & 2000/2001			
Agency	1999/2000	2000/2001	Total
	Contract Amount	Contract Amount	
Coachella Valley	\$513,377	\$1,026,753	\$1,540,130
San Diego	\$9,111	\$17,315	\$26,426
Orange	\$2,612,142	\$3,343,077	\$5,955,219
Riverside	\$62,252	\$98,152	\$160,404
San Bernardino	\$19,000	\$44,367	\$63,367
Los Angeles	\$268,660	\$358,262	\$626,922
Total	\$3,484,542	\$4,887,926	\$8,372,468

The principal elements of this plan and the results of program element activities to date are more fully described in the following sections of this report.



LOCAL TREATMENT

Treatment occurs when a sample of Red Imported Fire Ant, *Solenopsis invicta*, has been confirmed by a reputable diagnostics group such as the Plant Pest Diagnostics Branch of CDFA, qualified personnel from county department of agriculture, or other specified local entity.

For optimal results, all mounds within the infested area must be treated. Prior to initiating treatments, a thorough survey of the area must be conducted. Factors affecting determination of the treatment-area size include the following: disposition of find site (private property, nursery, business park, etc.); method and history of introduction; proximity of site to natural barriers such as dry areas, water bodies, etc.; and man-made barriers.

Granular bait treatments using a metabolic inhibitor (MI) or insect growth regulator (IGR) are the treatment methods of choice for RIFA. These materials can be distributed by broadcast methods over entire areas or small applications can be made to individual mounds. In most areas of Central and Southern California, both metabolic inhibitors, such as Amdro® (hydramethylnon), and an IGR, such as Distance® (pyriproxyfen), have been used to treat RIFA colonies.

The following precautions are taken during any treatment program:

- All pesticides are used according to registration and label directions.
- Agencies performing treatment activities obtain all necessary permits.
- All employees working with pesticides receive safety training, use appropriate safety equipment, and are under medical surveillance.

An efficacy survey of the treated area is performed no sooner than six weeks following bait treatment and is repeated every 60 days. The survey includes both visual and baiting techniques. Ants may not be visible after one treatment; therefore, post-treatment monitoring with protein bait is standard. The presence of RIFA will trigger an additional treatment. Eradication is declared after two seasons (spring through fall) if there is negative ant activity.



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Statewide Overview

Subsequent to the initial finds of RIFA in Orange and Riverside Counties, RIFA infestations have been located in seven additional counties throughout the state (Figure 1). With each new find in southern California, the CDFA has worked with local agencies to inform the public, determine the extent of the infestation, and apply treatments for RIFA (Table 3). Attachment V provides a complete list of communities with known RIFA infestations in California.

Table 3

Red Imported Fire Ant Treatments

Southern California Area			
County	Entity	Approx. Size of Treatment Zone (sq. mi.)	Treated Sites
Los Angeles	County Ag. Dept.	17.5	180
Orange	CDFA/Fire Ant Authority	135.0	350
Riverside	CDFA/Coachella Valley VC	51.0	255
	County Ag. Dept.	2.0	16
San Bernardino	County Ag. Dept.	1.0	7
San Diego	County Ag. Dept.	4.0	12
Totals		210.5*	820

* Square miles with one or more RIFA sites.



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Figure 1



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The following gives further details about the current situations in each of the eight infested counties:

- **Orange County** (Figure 2)

Trabuco Canyon in Orange County appeared to be the RIFA epicenter in November 1998. A subsequent survey found RIFA concentrated in the south, southeastern, and northern portions of the county. Small satellite infestations occurred elsewhere within the county. The entire county was surveyed visually by CDFA. Calls from the public, initiated by a mass mailer sent to all residences and businesses in the county, identified many missed sites. Public access locations were treated by CDFA in 1999. CDFA contracted with Orange County and the Orange County Mosquito Abatement and Vector Control District to conduct the program. Approximately 60 percent of the 350 known infested sites have been treated since the start of the treatment season in February 2000. Treatments have had a significant impact on the level of ant activity. Many of the heavily infested sites show a dramatic reduction in the number of mounds.

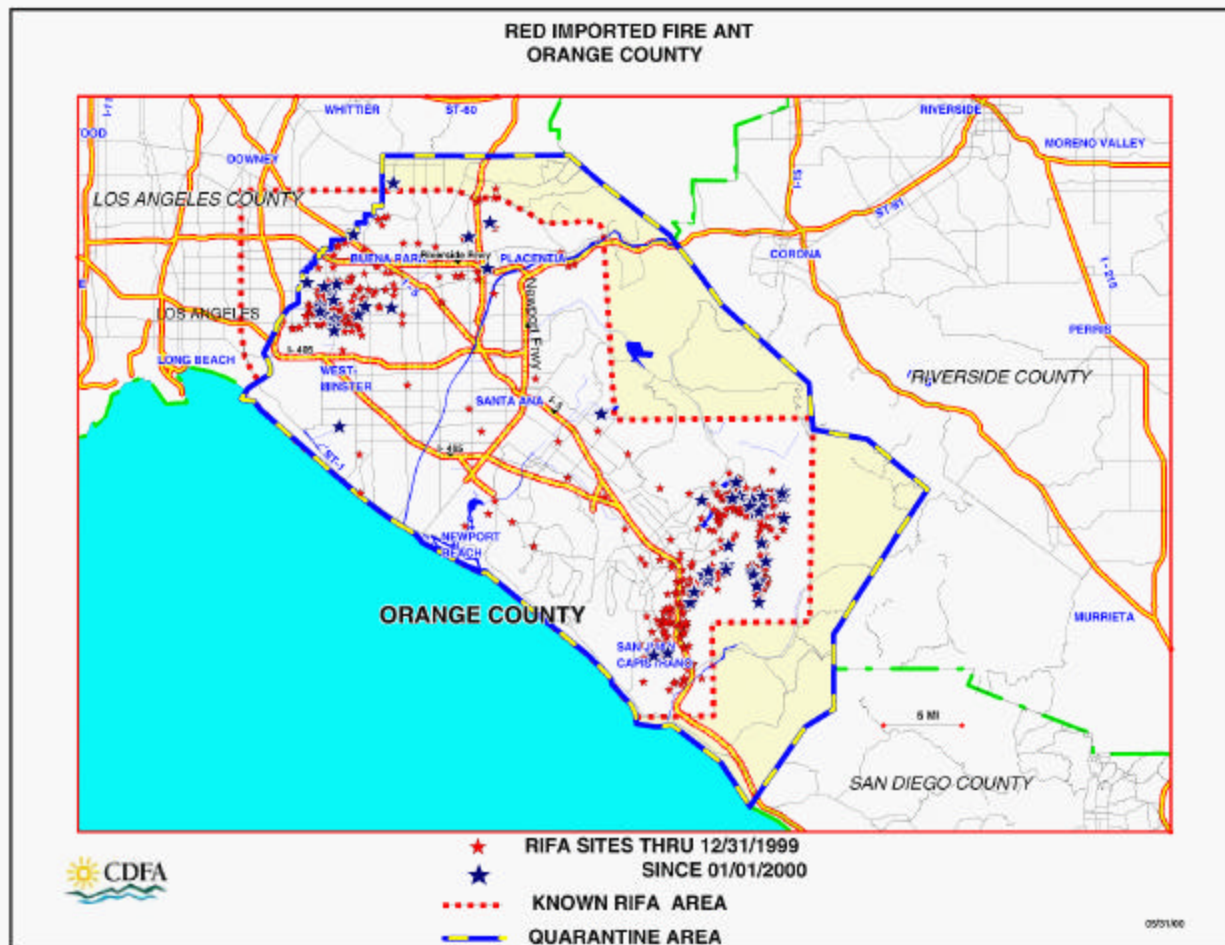


Figure 2



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- **Riverside County** (Figure 3a, b, and c)

Until the advent of the local agency contracts, the RIFA program in Riverside County was conducted by CDFA. Treatment on public access sites and golf courses took place through October 1999. This accounts for 32 percent of the treatable area. Concurrently, Riverside County and CDFA surveyed and treated RIFA finds in the western section of the county (Moreno Valley and Riverside). The treatments have resulted in the reduction of mound activity. The contracting agencies, Coachella Valley Vector Control and Riverside County Agriculture Department, assumed responsibility for the Palm Desert/Indio area and western Riverside County, respectively, in January 2000. Two new locations (Temecula and Orangecrest) were found to have small infestations this spring. Survey and treatment has started at these locations.

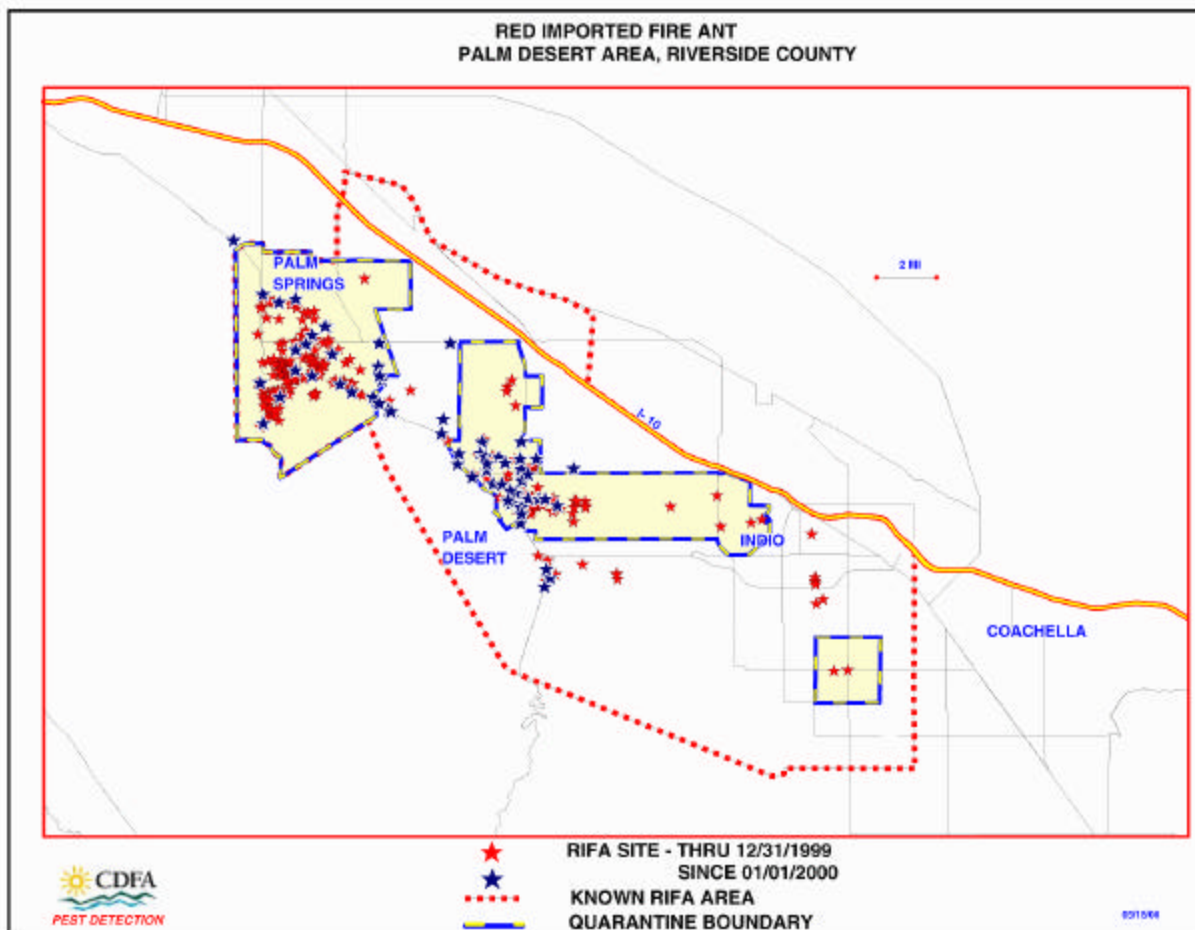


Figure 3a



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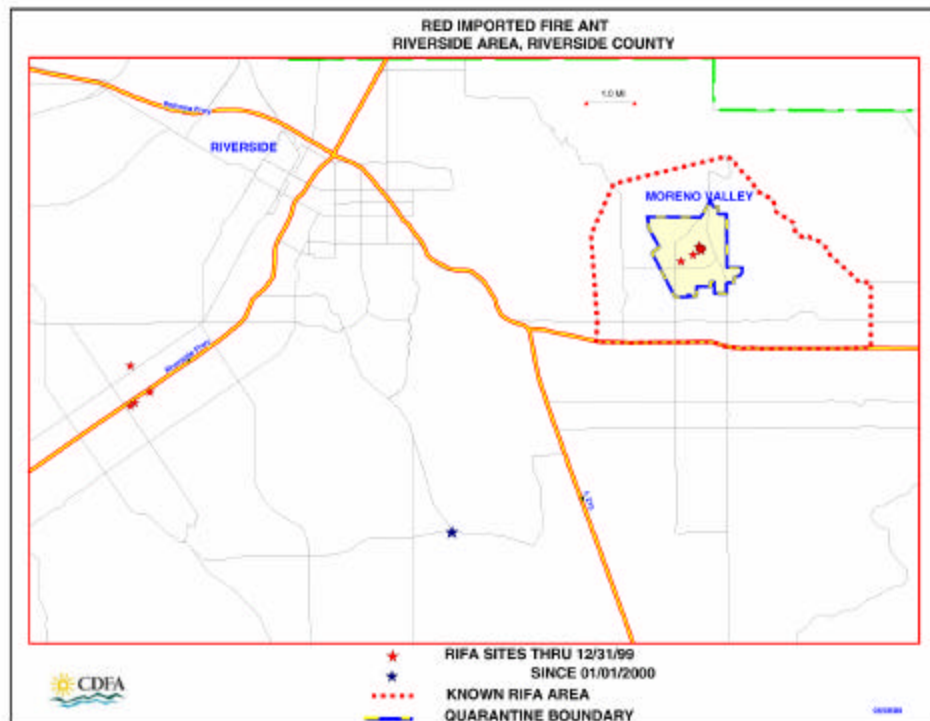


Figure 3b

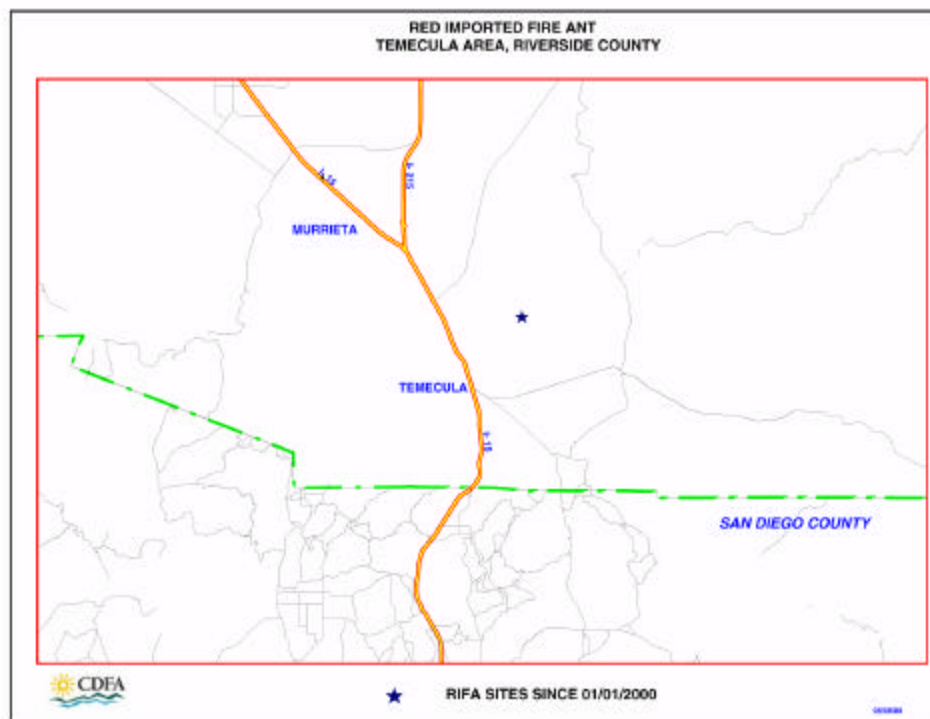


Figure 3c

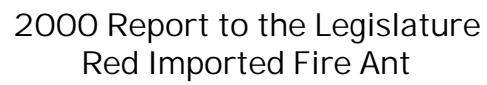


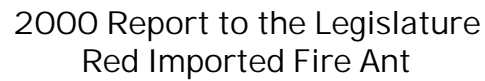
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Los Angeles County (Figure 4)

The initial discovery of RIFA in Los Angeles County occurred on April 14, 1999, when the pest was found infesting a commercial property in the City of Azusa. Subsequent delimitation surveys determined that RIFA was infesting 57 properties in the immediate vicinity. Los Angeles County personnel, assisted by CDFA, treated all of the infested properties per protocols. A large production nursery near the infested site contributed staff to survey activities in the vicinity. Following the initial finds, Los Angeles County has located 184 properties in 11 cities throughout the county (Arcadia, Azusa, Cerritos, Lakewood, La Mirada, La Puente, Mission Hills, Van Nuys, Walnut, West Covina, and Whittier). All known infested properties have been surveyed and treated at least once. In most cases, the sites have been treated more than once. Follow-up surveys have been conducted and show significant reduction in mound activity. Treatments and follow-up surveys will continue until multiple, intensive surveys using protein baits confirm that the RIFA has been eliminated from the known positive sites. This could take two or more years.

Los Angeles County and the CDFA are continuing to conduct detection surveys and public outreach activities throughout the county to find additional infestations of RIFA. New finds of RIFA, or continuing finds following treatments, will extend the time and resources required to eradicate RIFA in Los Angeles County.





In San Diego County, RIFA was first found in San Marcos on three properties and in an adjoining greenbelt in March 1999. Later, RIFA was also detected in Poway, Rancho Penasquitos (two areas), and a planting area at LegoLand Park. All locations were surveyed and treated one to two times. Post-treatment surveys show no RIFA at these sites except in Rancho Penasquitos, which had a low level of activity. The site was retreated and will be monitored this season.





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- **San Bernardino County** (Figure 6)

Seven adjacent residential properties in Fontana were found with RIFA in August 1999. These properties have been surveyed and have received two rounds of bait treatment. Post-treatment survey found ant activity on only one of the seven properties. An additional treatment is scheduled. This spring, a new infested location was found in the City of San Bernardino. Survey and treatment activities have started at this location.

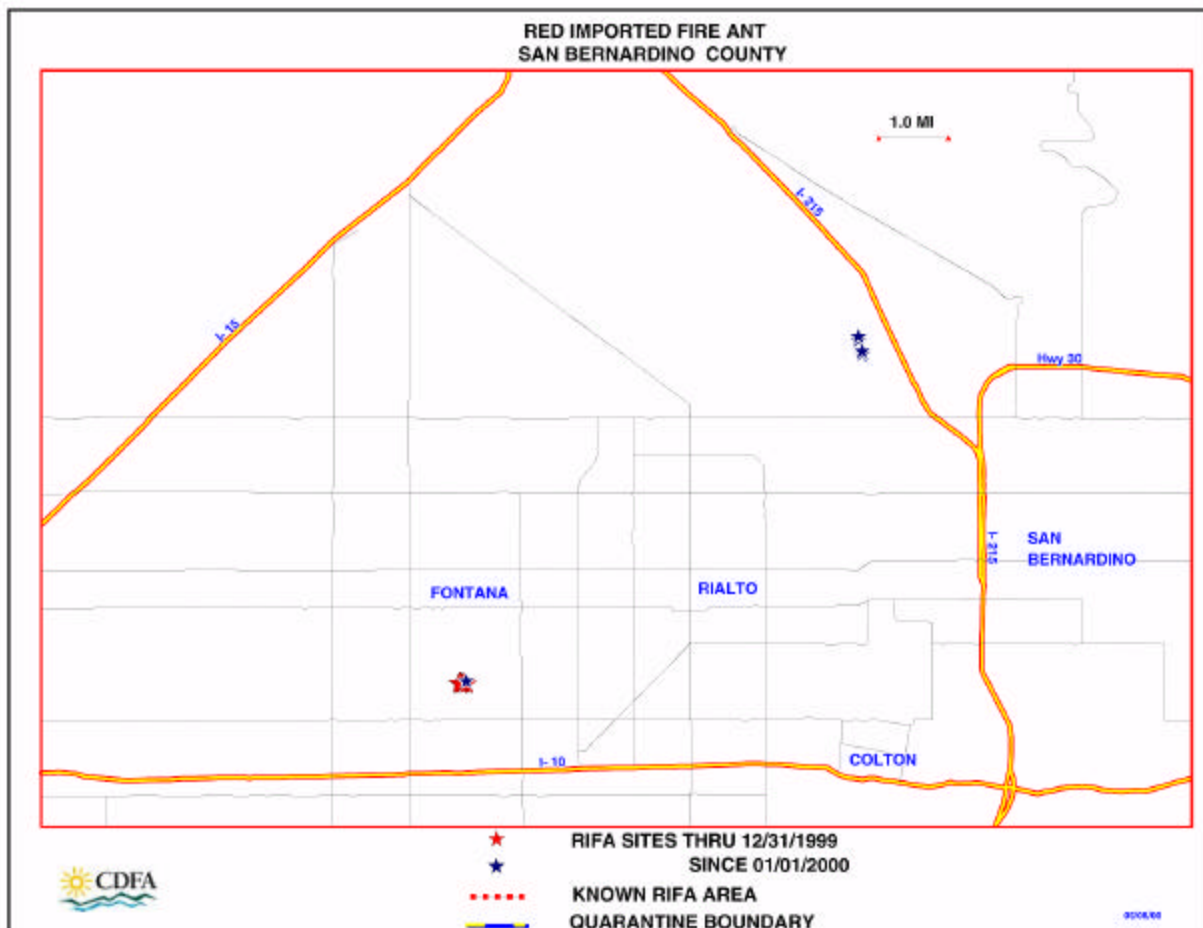


Figure 6



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PUBLIC OUTREACH

The public outreach program is a multi-tiered effort that includes handout materials, surveys, web-based information access, and overall advertising themes. CDFA is working cooperatively with each local entity to create outreach actions that avoid duplication and deliver clear, non-conflicting messages with interchangeable elements. As each local agency identifies its outreach needs and goals, additional outreach elements will be added. This effort requires a coordinated and consistent long-term delivery plan.

CDFA invited proposals from professional public relations firms to develop an overall public outreach campaign. A contract was awarded to Fleishman Hillard Communications, one of four firms that submitted proposals. As a temporary measure during the bidding process, an interim advertising campaign was started to quickly raise public awareness of the presence of RIFA in California. This program was designed to lay a foundation for the expansion of public outreach activities with the implementation of the Fleishman Hillard plan. The public relations contractor will implement a public awareness survey in the spring of 2000 and again in the fall of 2001 to measure change in the level of awareness. The following chart indicates the timetable for implementing the outreach plan elements (Figure 7):

	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	April	May	June
Fire Ant Colony and Tour														
Legislative Proclamation														
Public Service Announce.														
Watch Out Program/Utility														
New Home Education														
Professional Certification														
Print Materials/Premiums														
News Bureau														
School-based Program														
Community-based														
Mass Media Development														
Research Components														
Clipping and Analysis														
<ul style="list-style-type: none"> The green shaded areas indicate those time periods when the project will be in a planning phase. The yellow areas indicate the time periods when the project will be actively implemented. Immediate activities include research concept testing / benchmark and news bureau activities. 														

Figure 7



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Outreach Accomplishments

The outreach effort is aimed at increasing public awareness about the health risks associated with RIFA, notifying the public of what they can do if they find fire ant on their property, and using the public to report the presence of RIFA to the program via the toll-free hotline. Between July 1, 1999, and April 2000, the CDFA Public Affairs Office, in cooperation with local agencies in the affected areas, conducted a variety of activities to increase public awareness and increase the reporting of RIFA mounds.

The various outreach activities that have been implemented are listed below:

Poster/Brochure Distribution

- 1,500 “See RIFA/Report RIFA/Confirm RIFA” posters were mailed to all city and county public works offices, parks and recreation units, and law enforcement agencies in infested areas.
- 1,500 regulatory posters were delivered to the California Association of Nurseries, the Nursery Growers Association, and other similar industry organizations for distribution. CDFA regulatory personnel distributed an additional 500 posters during inspection rounds.
- Approximately 6,000 “How to Treat Fire Ants” fliers were delivered door to door.
- Project personnel, county trappers, and the California Conservation Corps delivered 250,000 doorknob hangers advising residents in infested areas about RIFA.
- CDFA mailed 1.5 million information packets in English, Spanish, and Vietnamese to homes in infested areas.

Advertising

Public service radio announcements were distributed by CDFA to 22 radio stations in the infested areas. Additionally, CDFA placed the following media advertisements in infested regions to raise public awareness of the fire ant problem and to direct the public to call the toll-free hotline to report RIFA on public or private property.

- ***Los Angeles Times***
Eight half-page advertisements were printed once a week on rotating days for eight weeks in each of the following newspaper publications for a total of 32 half-page advertisements:
 - Orange County Edition
 - San Gabriel Valley Edition
 - South Bay Edition
 - San Fernando Valley Edition



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- ***Orange County Register***
 - Two half-page advertisements
 - Six quarter-page (3X12) advertisements
- ***Riverside Press Enterprise***
 - Eight full-page advertisements in the Desert/Pass Edition
 - Two quarter-page advertisements in the full edition
- ***Cox Cablevision System***
 - 532 – 30-second advertisements at a rate of 35 spots per week for 16 weeks
- ***El Informador*** (Spanish language)
 - 52 quarter-page advertisements distribution to Coachella Valley, Riverside County, and southern Orange County
- ***KWIZ-FM*** (Spanish language radio)
 - 240 - 60-second commercials in Spanish for four weeks
- ***Vietnamese media***
 - community briefings as well as radio and newspaper advertising have been completed

Miscellaneous

Project staff presented information about the health risks, how to recognize the pest, basic biology, and how to report RIFA mounds to 40 community organizations and schools.

Displays

A 30-foot portable RIFA display was featured at the Orange County Fair and at the Los Angeles County Fair.

Community and Government Leaders

Protocols, brochures, and general public outreach information have been provided to each local government in infested communities. Briefing overviews and suggestions on local government actions have been provided to city and county government management, including city councils and county boards of supervisors. Hands-on seminars have been provided for training city and county workers regarding treatment methods available, as well as correct sample identification and data tracking procedures. CDFA will continue to provide this function over the course of the program.



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Call Management System

CDFA has established an Exotic Pest Hotline Call Management System (CMS) at one of its facilities in Southern California. This toll-free number (800-491-1899) is accessible statewide. Figure 8a shows the distribution of calls by county to the hotline for RIFA. Approximately 93 percent of the calls have come from Los Angeles, Orange, and Riverside Counties.

The goal of the CMS is to provide RIFA information to the public with maximum efficiency. A caller can follow a menu-driven format, via a touch-tone phone, to receive information on RIFA, quarantine guidelines, or information on other pests. The caller can also speak to an attendant to report suspicious ants or the presence of mounds. This information is recorded by the attendant and entered into an Internet database.

Information from the CMS Internet database is downloaded by the proper contracting agency. The agency screens the information, contacts the caller, and takes the appropriate steps for survey and treatment, if required. Additionally, the CMS attendants collect information about how the caller heard about the RIFA and the toll-free number. This information will help determine the effectiveness of the various outreach methods employed by the program (Figure 8b). Since the implementation of the CMS on May 10, 1999, the total number of RIFA-related calls routed through the system is 4,059.

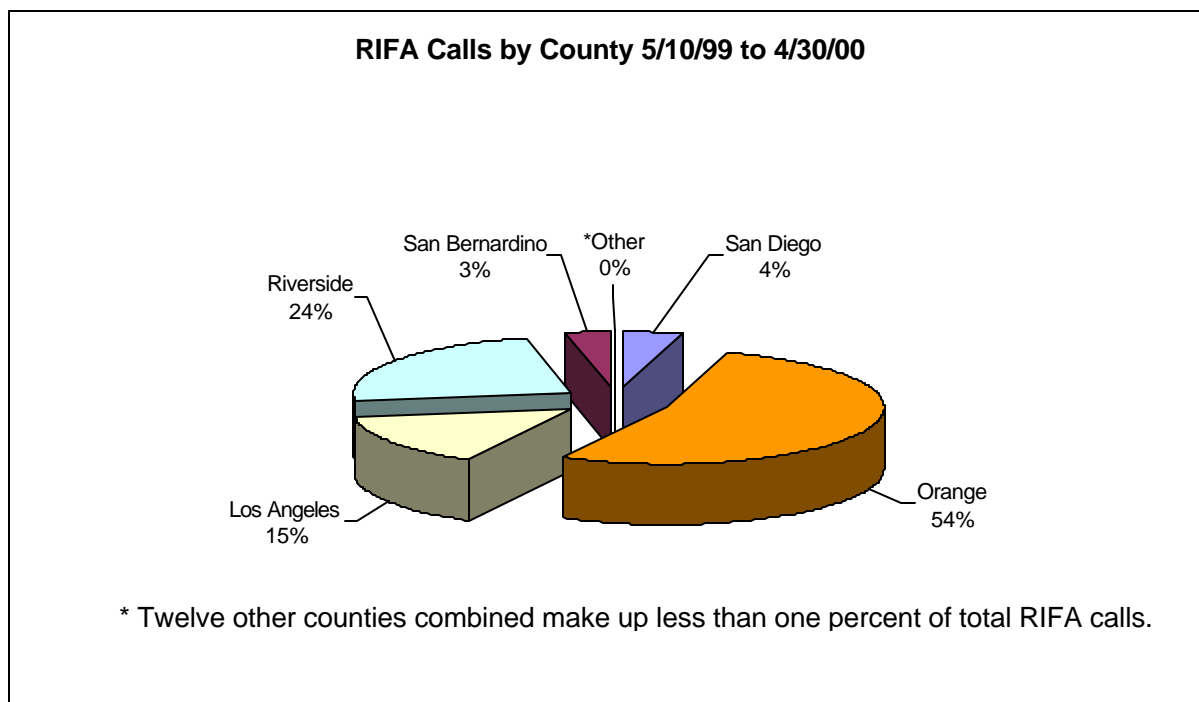


Figure 8a



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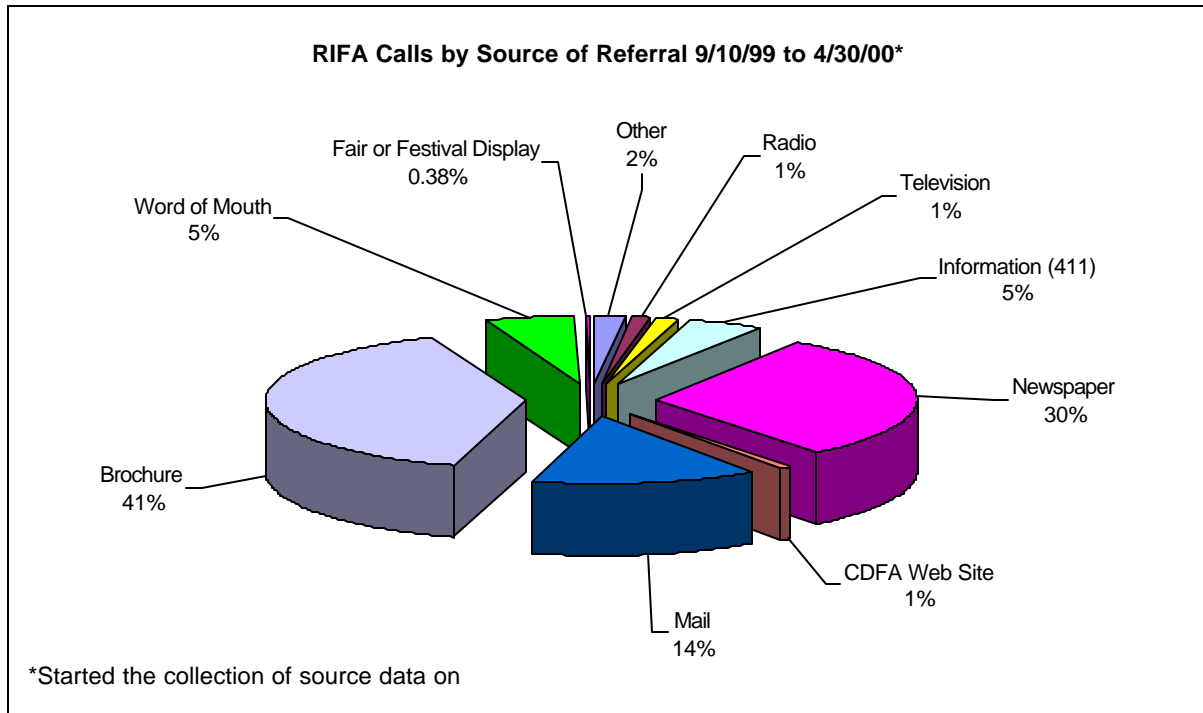


Figure 8b

Web Site

Information about RIFA is already available on the CDFA web site located at **www.cdfa.ca.gov/rifa**. This site will be expanded to provide specific information on each element of the problem including RIFA biology, public health, identification and location of colonies, and specific treatment options. The location for this information is included on all written and educational materials distributed to the public and provided to the media.

Partnerships

The nursery industry was an early partner in the distribution of information about this pest. The California Association of Nurserymen and the Nursery Growers Association posted informational posters at their members' wholesale and retail outlets. The public relations contractor will develop additional partnerships.



ENVIRONMENTAL MONITORING

Pesticide Runoff Mitigation

The Department of Pesticide Regulation (DPR), through an interagency agreement initiated by CDFA, conducts monthly surface water monitoring in Orange County. This monitoring provides information on the concentrations of bait and insecticide products that are used in the treatment and interior quarantine elements of the RIFA program. This study looks at chemical analyses and aquatic bio-toxicity of 10 flowing water sites within the county. This is a proactive approach to mitigation of runoff issues.

DPR has been taking monthly surface water samples since March 1999 from 10 sites (Figure 9) representing urban and nursery areas in Orange County. The objectives of these sampling activities are as follows: 1) to determine the concentration of RIFA insecticides in runoff water from irrigation or during a rainstorm; and 2) to assess toxicity of these samples to an indicator aquatic organism in a laboratory setting. DPR has conducted laboratory analysis on more than 300 water samples for the following RIFA chemicals: 1) baits – hydramethylnon, pyriproxyphen, and fenoxycarb; 2) granules – bifenthrin; and 3) sprays and others – chlorpyrifos and diazinon.

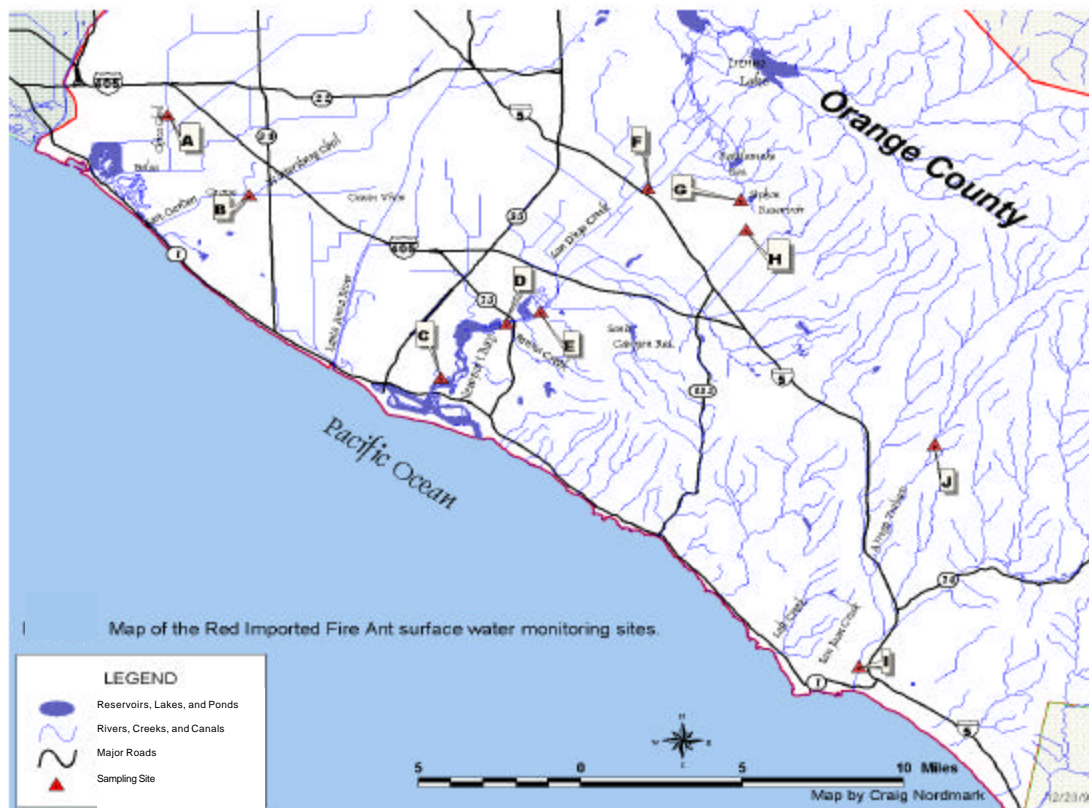


Figure 9



2000 Report to the Legislature Red Imported Fire Ant

Results of DPR analysis indicate the following:

- 1) Bait materials were detected once from one site with slight toxicity in laboratory tests.
- 2) Bifenthrin was detected from runoff at three nursery sites at toxic levels, but not downstream from the nurseries.
- 3) Chlorpyrifos and diazinon were detected in urban runoff with significant aquatic toxicity. Since these chemicals are readily available to homeowners for general insect control and have been present in the sampling area for some time prior to the start of the RIFA program, the relationship of these levels to the program activities is not known.

By proactively monitoring the fate of nursery stock treatments and by partnering with DPR and the University of California (UC) Cooperative Extension, a cooperative effort to mitigate the impact of pesticide runoff was started as soon as residues were identified. With the help of DPR and the UC Cooperative Extension, nurseries have successfully reduced the use of chlorpyrifos and diazinon. These two materials are of particular concern to the Regional Water Quality Control Board (RWQCB). The nurseries are being provided assistance in developing irrigation management to prevent runoff, implementing methods to capture surface water to precipitate residues, and use of vegetative barriers to filter surface water draining to nearby waterways. The RWQCB has expressed their positive opinion about the proactive approach and is appreciative of the collection of quantitative data, not only from the RIFA program, but also data that helps them characterize the materials in waterways under their jurisdiction.

The above bifenthrin detections, while triggering mitigation activities, were retrieved from waterways with very low flows. None of the runoff from nurseries has been identified in environmentally sensitive areas downstream from the sites.



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RESEARCH

Research will be needed to develop and fine-tune the methods to be used to continue this plan. The CDFA has consulted with scientists at UC Riverside and has developed the following five major research areas:

- Determine influence of California weather (hot summer temperatures, coastal fog, etc.) on RIFA foraging patterns throughout the year;
- Determine factors that trigger mating flights and their success in California;
- Test attraction and efficacy of available baits to RIFA and Argentine ant under California conditions;
- Evaluate new toxicants for RIFA, including fungal pathogens; and
- Determine interaction of RIFA with native and Argentine ants.

CDFA will continue to work with the RIFA SAP and other research organizations to identify further research areas.

Much is known of RIFA behavior and habitats in the southeastern portion of the United States. The CDFA has used this knowledge extensively in the development of the RIFA program. Because RIFA has been established in the southeastern United States for many decades, programs in that region are geared to control rather than eradication. This is not the case in California. The research being done here will build on the existing knowledge of the pest from elsewhere and will tailor this information to California's climate and terrain in order to capitalize on the limitations of RIFA in the state's environment. The University of California research facility in Irvine set up a fire ant laboratory within the quarantine zone to validate field treatments. Determinations can be made as to whether the queens have been killed and/or sterilized, depending upon the mode of treatment. This degree of precision (testing the queen for bait efficacy) has not been used in the rest of the country since their goal is suppression rather than eradication. With this analysis, the Irvine facility is in a position to recommend changes in treatment protocol, if needed. New fire ant treatment products are being tested to see what works best in California. Additionally, better field monitors and attractants are being designed.



QUARANTINE

The eradication strategy of any exotic pest includes a quarantine component. The objective of quarantine within the state is to prevent the spread of the pest via artificial means, such as commerce pathways. In the case of RIFA, the most common methods of artificial spread are nursery stock, soil movement, and landscaping materials.

A nest, a queen, or other evidence of an infestation will result in a property being placed under quarantine hold and intensive inspection of the properties within one mile of the infested property. If the infestation is limited to just a small number of properties, treatments will begin and the property owners will be prohibited from moving potentially infested materials unless they are certified free from RIFA.

Multiple infested properties in a limited area triggers a quarantine in a one-mile radius area around the positive properties. Multiple infestations over a wide area may require the quarantine of an entire county. Properties in a quarantine area are regulated to prevent the movement of ants from the area. Movement of ants (especially queens or nests) is possible in any type of non-compacted soil product being moved. Consequently, developers, builders, landscape contractors, lawn maintenance workers, nurseries, and homeowners within the quarantined area may be regulated. Compliance agreements signed by regulated businesses are a method of ensuring the movement of RIFA-free stock, and are a high priority in quarantine implementation and enforcement. The agreement defines the treatment protocols, pest monitoring processes, and conditions on movement of commodities.

In order to prevent the further spread of this pest and to allow the commercial movement of regulated commodities, quarantines were instituted in portions of Southern California. The quarantine areas cover 865.5 square miles (Los Angeles County, 8.5 square miles; Orange County, 790 square miles; and Riverside County, 67 square miles). Two hundred forty-five production nurseries in these counties, and five other nurseries elsewhere in California, are under compliance agreements with the RIFA Project (Figure 10).

Nurseries under quarantine compliance must treat growing grounds as well as any stock moving off the nursery property. They must undergo quarterly surveys by CDFA staff for the presence of the pest, and more frequent checks of records for the proper application of chemical treatments. Nursery stock and growing media are also sampled at destination for chemical residue to ensure that it was properly treated for RIFA at origin. After completing one year of treatments and quarterly monitoring with negative results for the presence of fire ant, a nursery can be declared as RIFA-free.



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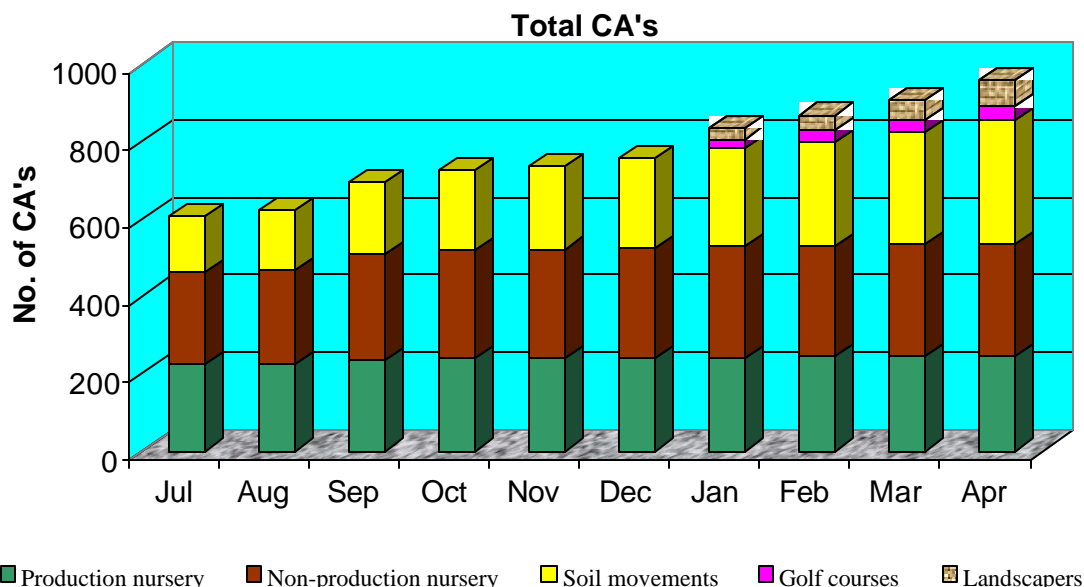


Figure 10

Statewide, 34 nursery growing sites were identified as positive for RIFA. Of these nurseries, 21 are within one of eight quarantine areas in Southern California. The remaining 13 infested nurseries, due to the nature of their infested condition and location, are under compliance agreements.

So far, five nurseries inside the quarantined areas have been declared RIFA-free. However, they must still perform preventative treatments since they are within the generally infested quarantine area. Their RIFA-free status expedites shipping nursery stock throughout California and the rest of the country. Seven infested nurseries outside the quarantine areas have been declared RIFA-free. These nurseries are free to resume business without restriction. The approximate location of infested and RIFA-free nurseries in California is indicated in Figure 11.

One of the elements of the RIFA project is to minimize negative impacts on commercial trade for the industries, especially the nursery industry. CDFA has directed the local entities to give high priority to survey and treatment of a one-mile radius around each nursery inside the quarantine areas. If CDFA can demonstrate that RIFA has been eliminated from the area surrounding nurseries, it may be possible to convince neighboring states and trading partners to accept nursery stock without the current level of pesticide applications. Reductions in pesticide applications would ease the burden on the nursery industry that to date has spent approximately \$1,500 per acre (roughly \$4 million per year) in RIFA pesticide treatments to allow their stock to be moved and sold.



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CDFA has entered into a Master Permit Agreement with the Arizona Department of Agriculture (ADA) for the shipment of nursery stock from California to Arizona. The purpose of this agreement is to allow RIFA-free nurseries located within quarantine areas to ship nursery stock into Arizona without the stock being held for additional inspections. Fourteen nurseries, representing approximately 1,340 acres, are participating under the terms of this master permit.

Since the implementation of the quarantine, no shipments of nursery stock to destinations outside the quarantine boundaries have been discovered to contain any RIFA.



Figure 11



STATEWIDE SURVEY AND TREATMENT

RIFA has been detected entering California on many different items including potted plants, commercial bee colonies, roofing material, frozen chickens, whiskey, oil pipe, hay, heavy equipment, and electrical transformers. With this in mind, detection surveys for RIFA are focused on likely end points for these materials including the following areas:

- Nurseries
- Almond orchards (most commercial bee colonies are brought into California for the pollination of almond trees)
- Urban landscaping established within the past seven years
- Truck parking areas and rest stops
- Building material storage areas
- Any other area that may present a risk of introduction

The statewide survey focuses on areas outside of the generally infested areas of Southern California. Visual and protein bait surveys are conducted and treatments are applied to any newly discovered infestation. The CDFA assumed responsibility for conducting the surveys and has worked cooperatively with county agricultural commissioners and other county agencies to coordinate and execute the surveys. Special attention has been given to nurseries and orchards in the Central Valley that may have received bees for pollination from RIFA infested states. The survey of orchards also enables migratory beekeepers to move their colonies out of the state at the end of the pollination season. Neighboring states maintain an interest in CDFA's orchard survey as assurance that no bee colonies are received from potentially infested orchards.

The discovery of an infested orchard triggers a treatment protocol to eradicate the colony. The first RIFA infested orchard in the Central Valley was found in 1997. In all, 10 sites totaling 3,284 acres have received approved bait treatments (Table 4). The orchards with the oldest infestations also received treatments in 1997 and 1998. Six of the treated orchards may now be RIFA free, but post-treatment monitoring will continue until two complete RIFA-free seasons have passed. Of the two remaining orchards, one was found late in 1999 and the second was heavily infested. The infestation in this second orchard has been reduced to only a few colonies. Treatment is continuing in both orchards with the prospects for complete eradication excellent.



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Table 4

Orchard Treatments by CDFA			
County	Orchard (acres)	Nursery (acres)	Residence
Fresno	1,774	10.6	
Kern	504	2.5	1
Santa Barbara		28.0	
Stanislaus	256		
Madera	750		
Totals	3,284	41.1	1

The statewide survey uncovered RIFA infestations at four nurseries in the cities of Fresno and Bakersfield and in Santa Barbara County. Each location was delimited with visual and protein bait surveys. Extensive surveys of the surrounding urban areas at the Fresno and Bakersfield locations were negative for RIFA. The nurseries have, and are continuing to receive, approved bait treatments for eradication of RIFA. Nursery stock is also being treated before it can leave the nursery site. Post-treatment surveys are being conducted at regular intervals. At this time, the nurseries in Fresno and Bakersfield appear to be free of RIFA.

As the result of a homeowner call in March 1999, a single RIFA colony was found at a residence in Bakersfield. Visual and protein bait survey in a 1.5-mile radius of the property turned up no additional RIFA colonies. The yard and colony were treated in March and again in July. RIFA has not been found at this location since May 1999. The owners had moved to Bakersfield from Texas about one and a half years earlier, bringing potted plants with them. This appears to have been the source of the infestation.

The statewide survey is being conducted over most areas of the state where RIFA could possibly survive. As of this date, the infestations mentioned above constitute the extent of RIFA infestations outside the generally infested area in Southern California. Although the survey is not complete and additional infestations can be anticipated, particularly in almond orchards in the San Joaquin Valley, the prospects for complete eradication in the San Joaquin Valley are good.

With the present level of knowledge concerning RIFA in California, risk-based detection surveys should be directed at sites throughout the state. CDFA will continue to work cooperatively with agricultural commissioners and other county agencies to coordinate and execute the survey.



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EXTERIOR QUARANTINE

California's agricultural inspection border stations are the first line of defense against RIFA. Over the past 10 years, RIFA has been intercepted an average of 156 times a year at the California border stations. With the inception of the RIFA program, exclusion activities have been increased at California's borders.

To augment California's exclusion efforts, CDFA is contracting with the Arizona Department of Agriculture to conduct RIFA inspections on the Arizona/New Mexico border, providing a large "buffer zone" for California. Additionally, a border station crew of roving inspectors monitors unguarded secondary roadways in Southern California for movement of RIFA host material. Due to the increased risk of reproductive colonies of ants moving on commodities in the late winter and spring, intensified inspections are conducted at five southern stations, focusing on high-risk commercial shipments of commodities likely to harbor RIFA such as beehives and nursery stock from infested areas. California and Arizona border inspectors have actively advised truckers, industry organizations, and major shippers of host material of CDFA's intensified inspections. This has had a positive impact on reducing the number of shipments of commodities infested with RIFA destined for California.

In the first eight months of Fiscal Year 1998/1999, the border stations intercepted 90 shipments of commodities infested with RIFA. In the same period of Fiscal Year 1999/2000, 12 shipments were detected with the pest (a decrease of 87 percent). Truck drivers and commodity shippers relayed that CDFA efforts in notifying them of the RIFA program has made them more selective in what commodities they move to California to avoid rejection at border stations. In 1999, eight shipments of bee colonies from out-of-state were found infested with RIFA by California inspectors. During the 2000 season, **just two shipments were found infested (a decrease of 75 percent). This reduction was a direct consequence of intensified inspections and the special outreach effort conducted by CDFA to the Texas bee industry alerting them of the state's "zero tolerance" for RIFA in bee colonies entering California.**

All RIFA interceptions in 2000 have come from shipments originating in the southeastern United States; however, as the pest expands its range from Texas into New Mexico, it is becoming an increased workload to both Arizona and California inspectors to assure commodities coming to the western states are free of the pest. Stringent and constant safeguards are necessary to prevent RIFA entry into California. Eradication will be pointless if the exclusion net is not in place to prevent re-infestation.



ASSESSMENT

Given the widespread nature of the infestation, the biology of the RIFA, the experience of other states, and the fact that RIFA has never been eradicated since being introduced into the United States, the CDFA assessment is that eradication will be very difficult to achieve and will take at least five years. An encouraging view is that California's terrain and climate offer obstacles to RIFA establishment. California does not have the summer rains of the southeast that accommodate synchronized mating flights, and this reduces the rate of natural expansion of the population. Also, arid areas, such as the desert and the central valley, encumber RIFA, restricting its movement to artificial (man-made) means rather than natural.

Given the extremely adverse impact of the RIFA on endangered species and other elements of the natural and human environment in the infested states, it is incumbent upon the CDFA to attempt to eradicate/control the pest. The community-based, environmentally sensitive plan that has been implemented is a five-year effort to achieve that goal.

First year results indicate that good progress has been made and that treatment and quarantine efforts have had an impact on the RIFA. A synopsis of the program success is shown below:

- Heavily infested areas of Orange and Riverside Counties are being treated, surveyed, retreated, and monitored. The results have been very promising in these heavily infested areas. To be successful, this process must continue for four to five years.
- Although the program has located and treated new sites within the infested area, all of the new infested sites have been quite small ranging from only one or two properties to approximately 23 properties.
- Small RIFA-infested sites in San Diego, San Bernardino and Los Angeles Counties have been treated and surveyed with favorable results.
- The treatment protocols and insecticide combinations designed for the program have clearly demonstrated their effectiveness.
- In the Central Valley, multiple surveys following treatments indicate that RIFA has probably been eliminated in all but two of the eight known infested almond orchards.
- A new exclusion system assures that bees being legally moved into the state from RIFA-infested areas are inspected. If RIFA-infested beehives are found, the hives are destroyed.
- Of the 34 nurseries originally found to be positive, 12 have eliminated RIFA from their properties. Quarantine enforcement has stopped the movement of the pest from infested nurseries.



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- CDFA has negotiated contracts with six local agencies to conduct the RIFA program. Local involvement builds the infrastructure in infested areas and assures a cadre of trained personnel to deal with RIFA now and in the future.
- An extensive public outreach program has been implemented to educate the public about the RIFA. The public education program will aid the state in eradicating, controlling, or excluding RIFA.
- Research is underway to determine the biology and behavior of the RIFA in California.

To review the progress of the program, CDFA re-convened the Red Imported Fire Ant Science Advisory Panel (RIFA SAP) in May 2000 in Costa Mesa, California. The review included a tour of several areas that had been heavily infested with RIFA during the RIFA SAP's 1998 visit.

The RIFA SAP was very impressed with the scope and intensity of RIFA activities to date in Southern California. The panel noted that a number of urban RIFA infestations had been treated with considerable success – an 80+ percent reduction in viable mounds. This level of success bodes well for the future of the RIFA eradication program. The RIFA SAP was especially impressed with the success at eliminating RIFA from the heavily infested nurseries in Orange County.

During the December 1998 visit of the RIFA SAP, the members expressed reservations about the possibility of eradicating RIFA from California. Based on what they saw in the May 2000 visit, they now believe that eradication of this pest from the state is potentially possible if the level of enthusiasm and commitment that they saw can be maintained along with the monetary support of the state government (Attachment IIb).

Successful eradication of the RIFA is wholly dependent upon the ability to locate infestations of the pest. Statewide survey for RIFA must continue in order to identify incipient infestations that escaped from Southern California prior to the start of the program. It is also the best means to identify infestations that may have started as the result of interstate movement of bees or commerce. Survey within the infested region of Southern California must be expanded in order to identify all possibly infested sites. Current program funding limits the extent to which both types of survey can be accomplished.

While it is too early to make any overall prediction of success or failure in California, the program has clearly made significant progress in suppressing the RIFA infestation(s) in the state. As public outreach is maximized and the first cycle of survey and treatment is completed, it is anticipated that even greater reductions of this pest will be apparent. The program in California has demonstrated that, with adequate funding, it is possible to establish an effective program against the RIFA.

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**Red Imported Fire Ant Science Advisory Panel
Comments and Recommendations**

**December 1-2, 1998
Orange County**

The Red Imported Fire Ant (RIFA) Science Advisory Panel (SAP) met in Orange County on December 1-2, 1998. The following are the comments and recommendations of the SAP:

The RIFA SAP has had an opportunity to evaluate the RIFA infestation in the Trabuco Canyon area of Orange County. This is an apparently isolated infestation currently 16 to 20 square miles in size. Further delimitation surveys may increase the size of the Trabuco Canyon infestation. This infestation is at least three to four years old. Its origins will likely never be known, and the issue is what to do about the infestation.

This RIFA infestation will spread unless actions are taken to reduce or eliminate it. In the southeastern United States, RIFA has caused significant damage to the environment including wildlife, native ants, and electrical equipment (such as air conditioners and electrical boxes). They sting people and pets, and can render infested yards unusable by children. It is possible that the same effects will be seen in California if the infestation is allowed to spread and increase in density.

California has several options available for dealing with the Trabuco Canyon RIFA infestation.

- Do nothing:** The infestation will spread and the density of colonies will increase possibly causing the serious environmental and health problems seen elsewhere.
- Try to suppress the infestation:** Based on experiences elsewhere, suppression may slow the spread of the RIFA infestation, but will not stop it. This strategy will delay but not prevent potential damage from the RIFA.
- Try to eradicate the infestation:** Eradication of an infestation this size in as complex an environment as in the Trabuco Canyon area has not been done before, but based on CDFA successes against other insects including boll weevil, Japanese beetle and various fruit flies, it appears possible. If eradication is attempted, the RIFA SAP has the following comments and recommendations:

1. The CDFA must delimit the infestation.
2. The program will take three to five years with intensive surveys during and after treatments.

3. The RIFA SAP will conduct an annual review of the project. If after five to seven years eradication of the Trabuco Canyon infestation has not been achieved, the effort should be stopped.
4. The project will require the cooperation and support of all affected parties including government, elected officials, nursery industry and residents in the infested area.
5. The project will need a strong education component covering the actions to be taken by the CDFA and the actions that can be taken by residents on their own properties.
6. The CDFA must close the pathways through which RIFA enter the state.
7. The CDFA should map all RIFA colonies it finds in an attempt to determine if the infestation is monocentric or polycentric.
8. The eradication treatments will utilize conventionally formulated, registered dry baits. There will be no need for cover sprays of contact insecticides. Insecticide treatments of individual mounds will not effect eradication, but they can be used in sensitive areas or to eliminate nuisance mounds.
9. Aerial application of the bait is the most effective and efficient application technique. Ground application alone of the bait in the Trabuco Canyon infestation will reduce the probability of success.
10. The RIFA SAP evaluated non-insecticidal options for eradication the RIFA infestation. Biological control using parasitic flies or ants, and RIFA pathogens is being explored, but no natural enemies of RIFA are currently available which can reduce the ant populations below damaging levels. Some commercial pathogen formulations are available, but they lack sufficient efficacy data to be recommended for use. Cultural controls for RIFA are not effective.
11. Individual homeowners can treat colonies on their properties, but the RIFA will quickly reinvade from adjacent untreated areas. Homeowners can eliminate nuisance colonies with two to three gallons of near boiling water (about 60% effective), by using commercially available ant baits or mound treatments of insecticides following label instructions.

**Preliminary Summary
Red Imported Fire Ant Science Advisory Panel
Comments and Recommendations**

This is a preliminary summary of the Red Imported Fire Ant (RIFA) Science Advisory Panel (SAP) recommendations. The final recommendations are pending. The RIFA SAP met May 23-24, 2000, in Costa Mesa, California, to review the California Department of Food and Agriculture (CDFA) RIFA Program and tour several areas that had been heavily infested with RIFA during the RIFA SAP's last visit to California 18 months ago. The RIFA SAP heard updates covering RIFA activities in each Southern California county infested with the pest (Los Angeles, Orange, Riverside, San Bernardino and San Diego) as well as CDFA RIFA activities in infested orchards and residences in the San Joaquin Valley.

The RIFA SAP was very impressed with the scope and intensity of RIFA activities to date in Southern California. Several of the programs had only started on February 1, 2000, yet they had already hired and trained staff, conducted extensive community outreach, done considerable RIFA detection and delimitation surveys, and started to treat those areas in which RIFA had been found. The RIFA SAP commended the enthusiasm and organization of the staff on these projects. The RIFA SAP was especially impressed with the use of Internet web sites and phone banks by the Orange County Vector Control, the lead RIFA agency in that county. The panel noted that a number of urban RIFA infestations had been treated with considerable success, an 80+ percent reduction in viable mounds. This level of success bodes well for the future of the RIFA eradication program.

The CDFA update on activities in San Joaquin Valley clearly demonstrated the extent of the CDFA commitment to keep this pest out of Central and Northern California. Several RIFA SAP members commented favorably about efforts of CDFA and agricultural commissioner staff to find all the almond orchards that had used Texas bees over the last five years and to survey these sites. The RIFA SAP noted that several lightly infested orchards were discovered only because of the diligence and persistence of the State and county staffers doing the surveys.

The RIFA SAP was especially impressed with the success of CDFA, county agricultural commissioner, and industry personnel at eliminating RIFA from the heavily infested nurseries in Orange County. Before the on-site visit, several RIFA SAP members would have bet money that they could find RIFA in these nurseries. After the on-site visit, they were amazed at the success of the ant elimination program.

The RIFA SAP had a number of recommendations about the current RIFA program in California. They suggested that we continue to standardize detection, delimitation, treatment, and reporting protocols. They also suggested that we now begin to develop the data necessary to document our future success at eliminating RIFA from selected areas in Southern California. This documentation will be critical when we approach the USDA APHIS about lifting the federal RIFA quarantine from parts of the infested counties.

Lastly, the RIFA SAP noted that at their last visit they expressed reservations about the possibility of eradicating RIFA from California. Based on what they saw in this visit, they now believe that eradication of this pest from the State is potentially possible if the level of enthusiasm and commitment that they saw can be maintained along with the monetary support of the State government.

Members of the RIFA SAP are listed in CDFA's "California Action Plan for the Red Imported Fire Ant," available upon request at (916) 654-1211.

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Agricultural Commissioners

BILL NUMBER: 204

CHAPTER 1010

An act relating to pest control, making an appropriation therefor, and declaring the urgency thereof, to take effect immediately.

(Approved by Governor October 10, 1999.
Filed with Secretary of State October 10, 1999.)

I am signing Senate Bill No. 204 which provides resources for local treatment to control and eradicate the Red Imported Fire Ant (RIFA). However, I am reducing the appropriation by \$7,500,000 leaving \$2 million for these purposes.

I included in my 1999-2000 budget \$8,800,000 for statewide eradication efforts. Additionally, the California Department of Food and Agriculture's multi-year action plan for control and eradication of this pest calls for additional funds in each of the next four budget years. I will review the need for these additional funds during the budget process.

In order to assist local jurisdictions with eradication efforts, I am directing the Secretary of Food and Agriculture to redirect \$4,000,000 from existing statewide funds for local treatment efforts.

Responsibility for eradication efforts must be borne primarily by the areas impacted, and funding for local treatment programs must reflect that responsibility. Therefore, I am directing the Secretary of Food and Agriculture to seek additional funds from both the federal government and local entities for these efforts.

GRAY DAVIS, Governor

LEGISLATIVE COUNSEL'S DIGEST

SB 204, Lewis. Red imported fire ants.

Existing law generally provides for the control and eradication of pests, as specified. Existing law also provides for the Red Imported Fire Ant Advisory Panel.

This bill would appropriate \$9,500,000 from the General Fund to the Department of Food and Agriculture Fund for the purpose of controlling and eradicating the infestation of the red imported fire ant in California, as specified.

The bill also would require the department, not later than June 30, 2000, to report to the Legislature outlining its expenditures and setting forth its progress in eradicating the infestation of the red imported fire ant in the state.

The bill would declare that it is to take effect immediately as an urgency statute.

Appropriation: yes.

The people of the State of California do enact as follows:

SECTION 1. (a) The Legislature hereby finds and declares that the red imported fire ant is known for its aggressive behavior and venomous bite, and can interfere with outdoor activities, and threaten people as well as animals and agriculture. Red imported fire ants have been

identified in six counties and are spreading rapidly, with new mounds being discovered daily. To date, there have been more than 32 deaths related to red imported fire ants throughout the nation.

(b) Notwithstanding Section 7550.5 of the Government Code, the Department of Food and Agriculture, not later than June 30, 2000, shall report to the Legislature outlining its expenditures and setting forth its progress in eradicating the infestation of the red imported fire ant in California.

SEC. 2. The amount of nine million five hundred thousand dollars (\$9,500,000) is hereby appropriated without regard to fiscal year from the General Fund to the Department of Food and Agriculture Fund for the purpose of controlling and eradicating the infestation of the red imported fire ant in California, as follows:

(a) The funds appropriated pursuant to this section shall be used for those costs that are incurred by the state or by local entities after the effective date of the bill that added this section.

(b) Whenever, in any county, funds are allocated by the Department of Food and Agriculture for local assistance regarding the red imported fire ant, those funds shall be made available to a local public entity, or local public entities, designated by that county's board of supervisors.

(c) Any funds allocated by the department to a designated local public entity or designated local public entities shall be utilized solely for activities consistent with the local red imported fire ant workplan.

(d) The development and implementation of the local red imported fire ant workplan shall be the responsibility of the designated local public entity. On request, the department shall provide consultation to the local public entity regarding the local red imported fire ant workplan.

(e) The local red imported fire ant workplan developed by the designated local public entity shall include, but is not limited to, all of the following:

(1) In coordination with the department, the development and delivery of public outreach information and training to local communities, groups, and individuals to organize their involvement with the work plan and to raise public awareness regarding the red imported fire ant.

(2) In coordination with the department, the development and delivery of ongoing training of the designated local public entity's employees in the biology, survey, and treatment of the red imported fire ant.

(3) The identification within the designated local public entity of a local red imported fire ant coordinator.

(4) A survey of locations of the red imported fire ant.

(5) The proposed treatment of the red imported fire ant. If pesticide treatment is proposed, the plan shall identify how the local public entity will comply with applicable laws and regulations regarding the use of pesticides.

(6) In coordination with the department, the development and implementation of a data collection system to track and report red imported fire ant activities.

(7) An annual budget for the workplan.

(f) On an annual basis, while funds appropriated by this section are available for encumbrance, the department shall review the progress of each local public entity's red imported fire ant activities and, as needed, make recommendations regarding those activities to the local public entity.

(g) Funds appropriated for local assistance shall not be allocated to a local public entity until the local public entity's red imported fire ant workplan is approved by the department as being consistent with subdivision (e) and, in addition, annually thereafter with recommendations required in subdivision (f).

SEC. 3. This act is an urgency statute necessary for the immediate preservation of the public peace, health, or safety within the meaning of Article IV of the Constitution and shall go into immediate effect. The facts constituting the necessity are:

In order to bring about the control and eradication of the red imported fire ant at the earliest possible time, it is necessary that this act take effect immediately.

Communities with RIFA Infestations By County

Fresno	Fresno, Kerman, Mendota, San Joaquin
Kern	Bakersfield, Lost Hills, Wasco
Los Angeles	Arcadia, Azusa, Cerritos, Lakewood, La Mirada, La Puente, Mission Hills, Van Nuys, Walnut, West Covina, Whittier
Orange	Anaheim, Anaheim Hills, Brea, Buena Park, Coto de Caza, Cypress, Dana Point, Dove Canyon, Fullerton, Garden Grove, Huntington Beach, Irvine, La Palma, Ladera, Laguna Beach, Laguna Hills, Laguna Niguel, Laguna Woods, Lake Forest, Las Flores, Los Alamitos, Mission Viejo, Newport Beach, Newport Coast, Placentia, Portola Hills, Rancho Santa Margarita, Rancho Trabuco, Robinson Ranch, San Juan Capistrano, Santa Ana, Stanton, Trabuco Canyon, Trabuco Highlands, Tustin, Westminster
Riverside	Cathedral City, Indian Wells, Indio, La Quinta, Moreno Valley, Orangecrest, Palm Desert, Palm Springs, Rancho Mirage, Riverside, Temecula, Thermal
San Bernardino	Fontana, San Bernardino
San Diego	Carlsbad, Poway, Rancho Penasquitos, San Marcos
Santa Barbara	Santa Barbara
Stanislaus	Newman